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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,415	08/17/2001	Debabrata Ghosh	45283.2	3885

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EDWARD YOO C/O BENNETT JONES  
1000 ATCO CENTRE  
10035 - 105 STREET  
EDMONTON, ALBERTA, AB T5J3T2  
CANADA

EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 05/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/931,415

Applicant(s)

GHOSH ET AL.

Examiner

Hai Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 27-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

1. Claims 1-26 have been cancelled in the amendment received on 03/19/2003.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 27-33 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanocki et al (US 5,955,177) substantially as set forth in Paper no. 8.
4. Claims 27-32 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by JP-3-28288. JP'288 teaches a sealing member comprising a matrix of ceramic fibers and a plurality of ceramic particles uniformly dispersed within the matrix, and an inorganic binder for binding the ceramic fibers with the ceramic particles (page 5, claim 1). The ceramic fiber is alumina silica fiber (page 5). The ceramic powder is alumina (page 5). Since the fiber mat of JP'288 meets all the structures required by the claims, it is the examiner's position that the fiber mat would be substantially, inherently not hermetically gas-tight as set forth in the claims. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete (Note discussion found in Ex parte Slob, 157 USPQ 172). Further, the non-hermetical seal would be inherently present, which is in line with In re Spada, 15 USPQ 2d 1655 (1990), products of identical chemical composition can not have mutually exclusive properties.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP-3-28288. JP'288 teaches the ceramic powder having an average particle size preferably less than 5 micron since the ceramic powder is attached to the ceramic fibers by an organic binder (page 5). The range disclosed JP'288 encompasses the range of the claimed invention. However, such a variable would have been recognized by one skilled in the art to impact the bonding strength between the ceramic fibers and the ceramic powder. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the ceramic powder having a particle size instantly claimed motivated by the desire to impact the bonding strength between the ceramic fibers and the ceramic powder, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanocki et al (US 5,955,177) or JP-3-28288 in view of Miyamichi et al (US 5,512,351). The primary reference fails to teach the ceramic particles comprising a first portion and a second portion wherein the average particle size of the first

portion is larger than the average particle size of the second portion. Miyamichi teaches a prepreg article useful as heat insulating member comprising the ceramic particles that includes a first portion and a second portion wherein the average particle size of the first portion is larger than the average particle size of the second portion to cause strong mutual bonding (example 2, column 7, lines 1-10). Miyamichi teaches the ceramic particles having the size less than 1 micron within the range disclosed by the primary reference. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the ceramic powder having a particle size instantly claimed motivated by the desire to cause strong mutual bonding within the article.

### ***Response to Arguments***

8. The claim objections and the 112 claim rejections have been overcome by the cancellation of claims 1-20.
9. The art rejections over Miyamichi, Ohkawa, and Mercuri have been overcome by the present amendment and response.
10. The art rejections over Sanocki have been maintained for following reasons. The arguments that Sanocki does not teach the fibre mat impregnated throughout with the particles as described in the Applicant's specification are not commensurate in scope with the claims. The language "interspersed" does not necessarily mean that the particles completely impregnated or uniformly interspersed through the fiber mat. The particles can partially be impregnated or randomly interspersed within the fiber mat. For these reasons, Sanocki reads on

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the claim limitations. Further, Sanocki discloses a fire barrier mat that is flexible and compressible (flexibility test, table 1, column 8, lines 44). Since the fiber mat of Sanocki meets all the structures required by the claims, it is the examiner's position that the fiber mat would be substantially, inherently not hermetically gas-tight as set forth in the claims. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete (Note discussion found in Ex parte Slob, 157 USPQ 172).

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV  
May 23, 2003



TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700